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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,739	12/12/2003	David Akopian	915-007.66	9582
4955 7590 03/05/2007 WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN, BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			EXAMINER TRAN, KHAI	
			ART UNIT 2611	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/05/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/734,739

Applicant(s)

AKOPIAN ET AL.

Examiner

KHAI TRAN

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 10 and 13 is/are rejected.
- 7) ☒ Claim(s) 2-9, 11, 12 and 14-21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/25/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Objections***

1. Claims 1, 10 are objected to because of the following informalities: Appropriate correction is required.

Regarding claim 1, line 9 and line 16, the term "an available replica code sequence" should be changed to --said available replica code sequence-- as set forth in claim 10; line 15, the term "a received code modulated signal" should be changed to --the received code modulated signal-- as set forth in claim 10.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2611

4. Claim 1, 10, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanada et al (U.S. Pat. 7,130,293) in view of Roh et al (US 2003/0137996 A1).

Regarding claim 1, Hanada et al disclose an apparatus supporting an acquisition of a received code modulated signal by determining the correlation between said received code modulated signal and an available replica code sequence at different code phases relative to each other, said apparatus as shown in Figure 11, comprising: a first correlator (201) for correlating a received code modulated signal and a code phase for generating replica code sequence; a second acquisition engine (a correlator 212) for receiving information on selected code phases from said first acquisition engine and for performing a refined comparison between a received code modulated signal and an available replica code sequence for each selected code phase on which information is received (col. 14, lines 18-46). Hanada et al fail to disclose a first acquisition engine for selecting code phases which are good candidates for being the code phase.

Roh et al disclose a selection of the PN codes having the peak correlation value, which correlates with the received code modulated signal (see [0042]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to select the good code phases from the PN code generator as taught Hanada et al into the teachings of Roh et al in order to perform correlation between the good code phase and the received code modulated signal. The motivation would reduce the time in performing correlations.

Claims 10 and 13 are similar to claim 1. Therefore, claims 10 and 13 are rejected under a similar rationale.

***Allowable Subject Matter***

5. Claims 2-9, 11-12, 14-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: Hadana and Roh fail to disclose wherein said first acquisition engine is adapted to select said code phases as part of a respectively selected set of a code phase and a frequency employed for a frequency compensation of said received code modulated signal, said first acquisition engine providing information on each selected set, and wherein said second acquisition engine is adapted to perform said refined comparison between a received code modulated signal and an available replica code sequence for the code phase of each set on which information is received and with a frequency compensation of said received code modulated signal using the frequency belonging to the respective set.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Iwasaki (U.S. Pat. 6,990,141) discloses a correlator.

Yamamoto (U.S. Pat. 6,343,094) discloses a spread spectrum signal receiving method and apparatus.

Kaewell, Jr. et al (US 2004/0047439 A1) disclose a path search using reconfigurable correlator sets.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI TRAN whose telephone number is (571) 272-3019. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAY PATEL can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
KHAI TRAN  
Primary Examiner  
Art Unit 2611